

IS 694 vs IS 17048: House-Wire Standards Explained

What the two key Indian house-wire standards cover — and which wire suits your building.

Overview

Two Indian Standards govern most single-core building wires. **IS 694** covers conventional PVC-insulated wires; **IS 17048** covers halogen-free flame-retardant (HFFR) wires. Knowing the difference helps you specify the right fire-safety grade.

	IS 694	IS 17048
Scope	PVC-insulated single-core wires & cables up to 1100 V	Halogen-free flame-retardant (HFFR) insulated wires & cables
Insulation	PVC (incl. FR, FR-LSH grades)	Halogen-free, low-smoke compound
Smoke in a fire	Lower with FR-LSH grades	Very low smoke
Halogen / acid gas	Present (reduced in LSH grades)	Zero halogen
Best for	General home & building wiring	Hospitals, schools, malls, high-rises, public spaces

For HFFR performance, see Anushakti Fire Protekt (EBXL HFFR); for low-smoke PVC, see Anushakti HR-FR-LSH.

Guidance only. Figures follow common Indian domestic practice (IS 732 / IS 694), assume copper conductors unless stated, and depend on run length, grouping, ambient temperature and installation. Always have the final design confirmed by a licensed electrician.